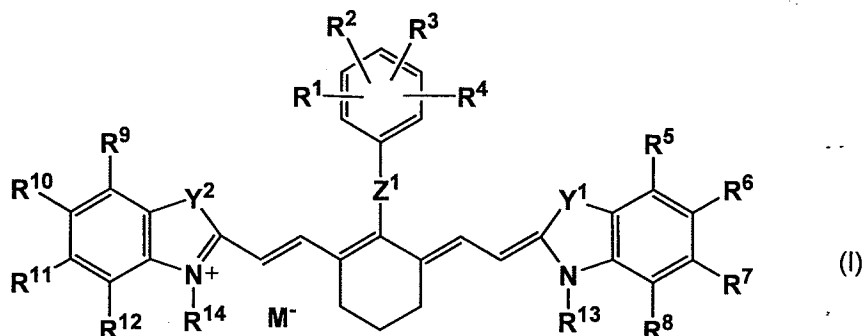


What is claimed is:

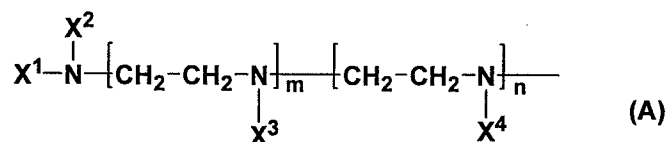
[1] A compound represented by the following general formula (I):

[Formula 1]



[wherein R¹ and R² independently represent hydrogen atom, or a group represented by the following formula (A):

[Formula 2]



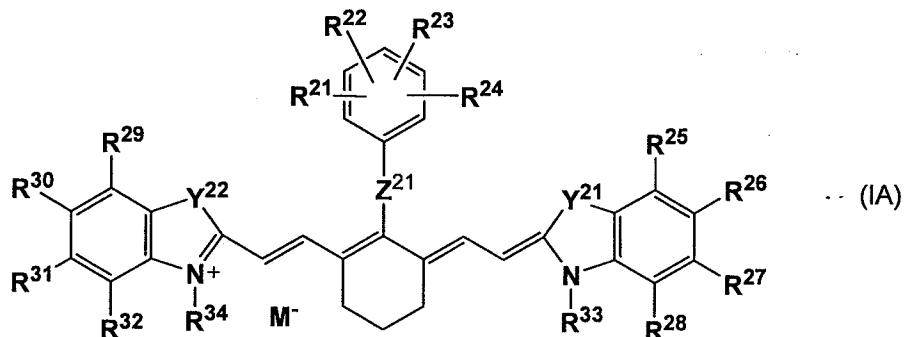
(wherein X¹, X², X³, and X⁴ independently represent hydrogen atom, an alkyl group which may have a substituent, or a protective group for amino group, and m and n independently represent 0 or 1), provided that R¹ and R² do not simultaneously represent hydrogen atom; R³ and R⁴ independently represent hydrogen atom, a C₁₋₆ alkyl group which may have a substituent, or a C₁₋₆ alkoxy group which may have a substituent; R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, R¹¹, and R¹² independently represent hydrogen atom, sulfo group, phospho group, a halogen atom, or a C₁₋₆ alkyl group which may have a substituent; R¹³ and R¹⁴ independently represent a C₁₋₁₈ alkyl group which may have a substituent; Z¹ represents oxygen atom, sulfur atom, or -N(R¹⁵)- (wherein R¹⁵ represents hydrogen atom, or a C₁₋₆ alkyl group which may have a substituent); Y¹ and Y² independently represent -C(=O)-, -C(=S)-, or -C(R¹⁶)(R¹⁷) (wherein R¹⁶ and R¹⁷ independently represent a C₁₋₆ alkyl group which may have a substituent); and M⁻ represents a counter ion in a number required for neutralizing the charge].

[2] A fluorescent probe containing the compound represented by the general formula (I) according to claim 1 (except for a compound wherein any one or more of X¹, X², X³,

and X⁴ represent a protective group for amino group).

[3] A compound represented by the following general formula (IA):

[Formula 3]



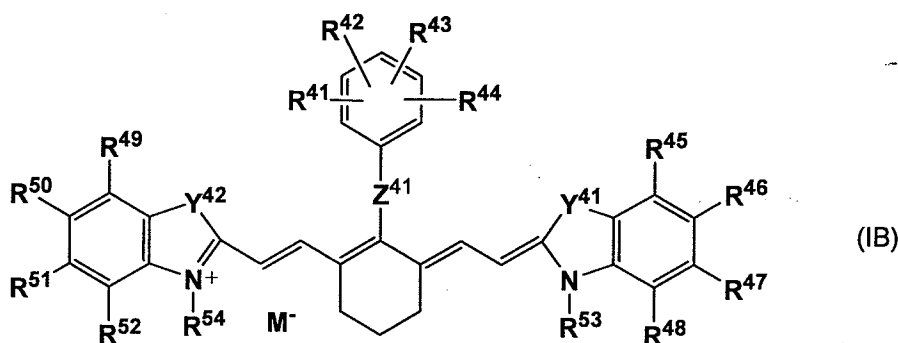
[wherein R²¹ and R²² represent amino groups substituting at adjacent positions on the benzene ring, and one of the amino groups may have one alkyl group which may have a substituent; R²³ and R²⁴ independently represent hydrogen atom, a C₁₋₆ alkyl group which may have a substituent, or a C₁₋₆ alkoxy group which may have a substituent; R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, R³¹, and R³² independently represent hydrogen atom, sulfo group, phospho group, a halogen atom, or a C₁₋₆ alkyl group which may have a substituent; R³³ and R³⁴ independently represent a C₁₋₁₈ alkyl group which may have a substituent; Z²¹ represents oxygen atom, sulfur atom, or -N(R³⁵)- (wherein R³⁵ represents hydrogen atom, or a C₁₋₆ alkyl group which may have a substituent); Y²¹ and Y²² independently represent -C(=O)-, -C(=S)-, or -C(R³⁶)(R³⁷)- (wherein R³⁶ and R³⁷ independently represent a C₁₋₆ alkyl group which may have a substituent); and M⁻ represents a counter ion in a number required for neutralizing the charge].

[4] The compound according to claim 3, wherein R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰, R³¹, and R³² are hydrogen atoms, R³³ and R³⁴ are C₁₋₆ alkyl groups substituted with sulfo group, Z²¹ is oxygen atom, and Y²¹ and Y²² are -C(CH₃)₂-.

[5] A reagent for measurement of nitrogen monoxide, which contains the compound represented by the general formula (IA) according to claim 3.

[6] A compound represented by the following general formula (IB):

[Formula 4]



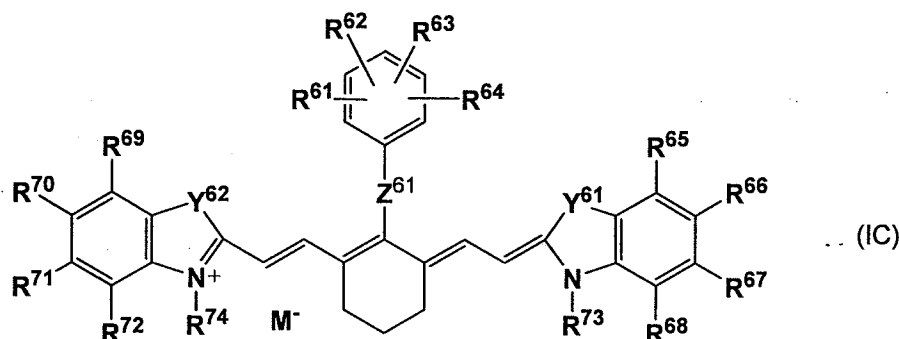
[wherein R⁴¹ and R⁴² combine together to represent a group represented by -N=N-NR⁵⁸- which forms a ring at the adjacent positions on the benzene ring (wherein R⁵⁸ represents hydrogen atom, or a C₁₋₆ alkyl group which may have a substituent), or R⁴¹ and R⁴² represent a combination of an amino group (which may have a C₁₋₆ alkyl group which may have a substituent, or a protective group for amino group) and nitro group substituting at adjacent positions on the benzene ring; R⁴³ and R⁴⁴ independently represent hydrogen atom, a C₁₋₆ alkyl group which may have a substituent, or a C₁₋₆ alkoxy group which may have a substituent; R⁴⁵, R⁴⁶, R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰, R⁵¹, and R⁵² independently represent hydrogen atom, sulfo group, phospho group, a halogen atom, or a C₁₋₆ alkyl group which may have a substituent; R⁵³ and R⁵⁴ independently represent a C₁₋₁₈ alkyl group which may have a substituent; Z⁴¹ represents oxygen atom, sulfur atom, or -N(R⁵⁵)- (wherein R⁵⁵ represents hydrogen atom, or a C₁₋₆ alkyl group which may have a substituent); Y⁴¹ and Y⁴² independently represent -C(=O)-, -C(=S)-, or -C(R⁵⁶)(R⁵⁷)- (wherein R⁵⁶ and R⁵⁷ independently represent a C₁₋₆ alkyl group which may have a substituent); and M⁻ represents a counter ion in a number required for neutralizing the charge].

[7] The compound according to claim 6, wherein R⁴³, R⁴⁴, R⁴⁵, R⁴⁶, R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰, R⁵¹, and R⁵² are hydrogen atoms, R⁵³ and R⁵⁴ are C₁₋₆ alkyl groups substituted with sulfo group, Z⁴¹ is oxygen atom, and Y⁴¹ and Y⁴² are -C(CH₃)₂-.

[8] A method for measuring nitrogen monoxide, which comprises (a) the step of reacting the compound represented by the general formula (IA) according to claim 3 with nitrogen monoxide; and (b) the step of detecting the compound of the general formula (IB) according to claim 6 [wherein R⁴¹ and R⁴² combine together to represent a group represented by -N=N-NR⁵⁸- which forms a ring at the adjacent positions on the benzene ring (wherein R⁵⁸ represents hydrogen atom, or a C₁₋₆ alkyl group which may have a substituent)] produced in the step (a).

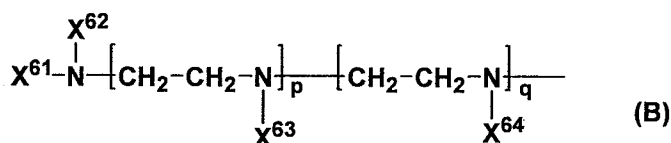
[9] A compound represented by the following general formula (IC):

[Formula 5]



[wherein R⁶¹ and R⁶² independently represent hydrogen atom, or a group represented by the following formula (B):

[Formula 6]



(wherein X⁶¹, X⁶², X⁶³, and X⁶⁴ independently represent hydrogen atom, an alkyl group which may have a substituent, or a protective group for amino group, and p and q independently represent 0 or 1), provided that R⁶¹ and R⁶² do not simultaneously represent hydrogen atom, and when R⁶¹ and R⁶² simultaneously represent a group represented by the formula (B), in at least one of the groups represented by the formula (B), either p or q, or both represent 1; R⁶³ and R⁶⁴ independently represent hydrogen atom, a C₁₋₆ alkyl group which may have a substituent, or a C₁₋₆ alkoxy group which may have a substituent; R⁶⁵, R⁶⁶, R⁶⁷, R⁶⁸, R⁶⁹, R⁷⁰, R⁷¹, and R⁷² independently represent hydrogen atom, sulfo group, phospho group, a halogen atom, or a C₁₋₆ alkyl group which may have a substituent; R⁷³ and R⁷⁴ independently represent a C₁₋₁₈ alkyl group which may have a substituent; Z⁶¹ represents oxygen atom, sulfur atom, or -N(R⁷⁵)- (wherein R⁷⁵ represents hydrogen atom, or a C₁₋₆ alkyl group which may have a substituent); Y⁶¹ and Y⁶² independently represent -C(=O)-, -C(=S)-, or -C(R⁷⁶)(R⁷⁷)- (wherein R⁷⁶ and R⁷⁷ independently represent a C₁₋₆ alkyl group which may have a substituent); and M⁺ represents a counter ion in a number required for neutralizing the charge].

[10] A fluorescent probe for zinc containing the compound represented by the general

formula (IC) according to claim 9 (except for a compound wherein any one or more of X^{61} , X^{62} , X^{63} , and X^{64} are protective group for amino group).

[11] A zinc complex formed from the compound represented by the general formula (IC) according to claim 9 (except for a compound wherein any one or more of X^{61} , X^{62} , X^{63} , and X^{64} are protective group for amino group), and a zinc ion.

[12] A method for measuring zinc ions, which comprises (a) the step of reacting the compound represented by the aforementioned general formula (IC) according to claim 9 (except for a compound wherein any one or more of X^{61} , X^{62} , X^{63} , and X^{64} are protective group for amino group) with a zinc ion, and (b) the step of measuring fluorescence intensity of a zinc complex produced in the step (a).